

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

MAILED

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U.S. PATENT AND TRADEMARK OFFICE  
BOARD OF PATENT APPEALS  
AND INTERFERENCES

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

*Ex parte* GERARD LANG, JEAN COTTERET,  
and MIREILLE MAUBRU

Appeal No. 2004-2143  
Application 09/424,116

HEARD: JANUARY 12, 2005

Before PAK, OWENS and DELMENDO, *Administrative Patent Judges*.

OWENS, *Administrative Patent Judge*.

*DECISION ON APPEAL*

This appeal is from the final rejection of claims 26-60, which are all of the claims pending in the application.

*THE INVENTION*

The appellants claim a composition for the oxidation dyeing of keratin fibers, comprising a specified direct dye and coupler. Claim 26 is illustrative and is appended to this decision.

*THE REFERENCES*

Lang	4,025,301	May 24, 1977
Konrad et al. (Konrad)	4,588,410	May 13, 1986
Rondeau et al. (Rondeau '273)	5,919,273	Jul. 6, 1999 (filed Dec. 19, 1997)
Rondeau et al. (Rondeau '135)	6,001,135	Dec. 14, 1999 (filed Dec. 19, 1997)

*THE REJECTIONS*

The claims stand rejected as follows: claims 26-60 under 35 U.S.C. § 103 over Rondeau '273; claims 26-60 under the doctrine of obviousness-type double patenting over claims 1-43 of Rondeau '273; claims 26-36 and 40-60 under 35 U.S.C. § 103 over Lang in view of Konrad; and claims 37-37 under 35 U.S.C. § 103 over Lang in view of Konrad and Rondeau '135.

*OPINION*

We reverse the rejections over Rondeau '273 and affirm the rejections over Lang in view of Konrad and over Lang in view of Konrad and Rondeau '135.

The appellants state that the claims stand or fall together as to each rejection (brief, pages 5-6).<sup>1</sup> We therefore limit our discussion of the affirmed rejections to one claim to which each

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<sup>1</sup>Citations herein to the brief are to the revised second appeal brief (filed November 13, 2003).

rejection applies, i.e., claims 26 and 37. See *In re Ochiai*, 71 F.3d 1565, 1566 n.2, 37 USPQ2d 1127, 1129 n.2 (Fed. Cir. 1995); 37 CFR § 1.192(c)(7)(1997).

*Rejections over Rondeau '273*

Rondeau '273 discloses a composition for the oxidation dyeing of keratin fibers, comprising 1) at least one oxidation base, 2) a direct dye that can fall within the appellants' formula I except for being a 4-aminopyridine derivative instead of the appellants' 3-aminopyridine derivative, and 3) at least one coupler selected from meta-aminophenol derivatives and acid-addition salts thereof, some of which fall within the appellants' formula II (col. 2, line 4 - col. 3, line 34; col. 12, lines 40-45 and claim 19 (formula II30)).

The examiner argues, in reliance upon *In re Wilder*, 563 F.2d 457, 195 USPQ 426 (CCPA 1977), that compounds which are position isomers are generally of sufficiently close structural similarity that there is a presumed expectation that the compounds possess similar properties (answer, page 4). This similarity of properties, the examiner argues, is the motivation for substituting the appellants' direct dye for that of Rondeau '273 (answer, pages 4-5).

"When the PTO seeks to rely upon a chemical theory, in establishing a prima facie case of obviousness, it must provide evidentiary support for the existence and meaning of that theory. [citation omitted] The known structural relationship between adjacent homologs, for example, supplies a chemical theory upon which a prima facie case of obviousness of a compound may rest."

*In re Grose*, 592 F.2d 1161, 1167-68, 201 USPQ 57, 63 (CCPA 1979).

In *Wilder* the structurally similar compound found to be obvious was an adjacent homolog of a compound in the reference. See *Wilder*, 563 F.2d at 461, 195 USPQ at 430. The examiner, however, has not provided the required evidentiary support for the existence and meaning of her theory regarding the structural similarity of the appellants' 3-aminopyridine derivatives and the Rondeau '273 4-aminopyridine derivatives. Consequently, we reverse the rejections over Rondeau '273 under 35 U.S.C. § 103 and under the doctrine of obviousness-type double patenting.<sup>2</sup>

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<sup>2</sup> In the event of further prosecution the examiner should consider whether the appellants' claimed invention would have been obvious to one of ordinary skill in the art over Rondeau '273 in view of Lang which discloses the appellants' 3-aminopyridine derivative direct dye and teaches that it can be included in a composition for the oxidation dyeing of hair (col. 1, lines 8-60; col. 3, lines 45-48).

*Rejection over Lang in view of Konrad*

Konrad discloses an oxidative hair coloring composition comprising known developer substances, an oxidation agent, and a coupler falling within the appellants' formula II (col. 2, line 44 - col. 3, line 1; col. 4, lines 28-38).

Lang discloses a hair dye composition that contains a direct dye falling within the appellants' formula I (col. 1, lines 8-60; examples 8-15, 23, 24 and 27-29). Lang teaches that "[t]he compositions of the present invention can also be employed together with an oxidation dye and an oxidizing agent such as  $H_2O_2$  which can be added at the moment of use" (col. 3, lines 45-48).

The examiner finds that "direct cationic dyes are known additives to oxidation dyeing compositions to provide added glints and shades" (answer, page 9). This finding is reasonable, as indicated by Rondeau '273 ("It is known that in order to vary the shades obtained further and to give them glints, it is possible to use, in combination with the oxidation dye precursors and the couplers, direct dyes, i.e., colored substances which provide coloration in the absence of an oxidizing agent" (col. 1, lines 40-44)). For this reason and because the examiner's finding has not been challenged by the appellants, we accept it

as fact. See *In re Kunzmann*, 326 F.2d 424, 425 n.3, 140 USPQ 235, 236 n.3 (CCPA 1964).

Thus, it would have been *prima facie* obvious to one of ordinary skill in the art to add Lang's direct dye to Konrad's oxidation dye composition to provide added glints and shades.

The appellants argue that "Konrad is silent with respect to compatibility and use with direct dyes" (brief, page 24) and that "dye components can interact" (reply brief, page 15). Lang, however, teaches that his direct dye can be used in combination with oxidation dyes (col. 3, lines 45-48). Consequently, one of ordinary skill in the art would have had a reasonable expectation of success in including Lang's direct dye in Konrad's oxidation dye composition. For a *prima facie* case of obviousness to be established, all that is needed is a reasonable expectation of success, not absolute certainty. See *In re O'Farrell*, 853 F.2d 894, 903-04, 7 USPQ2d 1673, 1681 (Fed. Cir. 1988).

We therefore conclude that the invention claimed in the appellants' claim 26 would have been obvious to one of ordinary skill in the art over the combined teachings of Lang and Konrad. Accordingly we affirm the rejection of that claim and claims 27-36 and 40-60 that stand or fall therewith.

*Rejection over Lang in view of Konrad and Rondeau '135*

Claim 37 requires that the oxidation base in claim 26 is a double base having a specified formula (IV).

Rondeau '135 discloses an oxidation dye composition wherein the oxidation base can be any of a long list of compounds, some of which are double bases within the appellants' formula IV (col. 7, line 65 - col. 10, line 50). Because Konrad indicates that the oxidation base in his composition can be selected from the oxidation bases known in the art (col. 4, lines 30-31), it would have been *prima facie* obvious to one of ordinary skill in the art to use as the oxidation base any of those disclosed by Rondeau '135, including the double bases.

The appellants argue that it has not been established that the Rondeau '135 oxidation bases are equivalent for all purposes (brief, pages 35-37; reply brief, pages 17-19). Konrad's indication that the oxidation bases known in the hair dyeing art are suitable for use in his composition would have motivated one of ordinary skill to use any of those oxidation bases, and would have provided such a person with a reasonable expectation of success in doing so. Consequently, it would have been *prima facie* obvious to one of ordinary skill in the art to use any of the Rondeau '135 oxidation bases, including the double bases, in

Konrad's oxidation dye composition. See *In re Vaeck*, 947 F.2d 488, 493, 20 USPQ2d 1438, 1442 (Fed. Cir. 1991).

Hence, we conclude that the invention claimed in the appellants' claim 37 would have been obvious to one of ordinary skill in the art over the combined teachings of Lane, Konrad and Rondeau '135. We therefore affirm the rejection of that claim and claims 38 and 39 that stand or fall therewith.

*DECISION*

The rejections of claims 26-60 under 35 U.S.C. § 103 over Rondeau '273, and under the doctrine of obviousness-type double patenting over claims 1-43 of Rondeau '273, are reversed. The rejections of claims 26-36 and 40-60 under 35 U.S.C. § 103 over Lang in view of Konrad, and claims 37-37 under 35 U.S.C. § 103 over Lang in view of Konrad and Rondeau '135, are affirmed.

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No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

*AFFIRMED*

*Chung K. Pak*  
CHUNG K. PAK )  
Administrative Patent Judge )  
 )  
 )  
*Terry J. Owens* ) BOARD OF PATENT  
TERRY J. OWENS )  
Administrative Patent Judge ) APPEALS AND  
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*Romulo H. Delmendo* ) INTERFERENCES  
ROMULO H. DELMENDO )  
Administrative Patent Judge )

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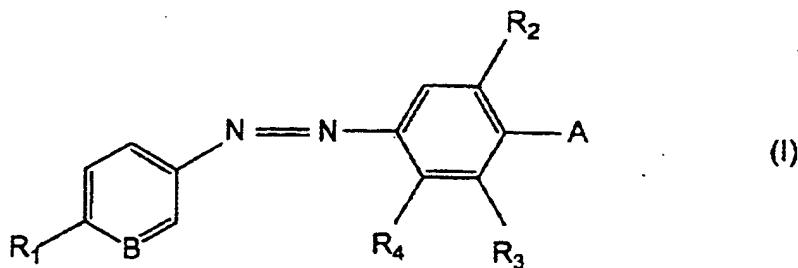
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APPENDIX

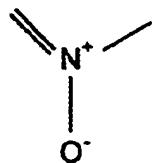
26. A composition for the oxidation dyeing of keratin fibers comprising:

- a) at least one oxidation base, and
- b) as direct dye, at least one 3-aminopyridine derivative chosen from the compounds of formula (I):

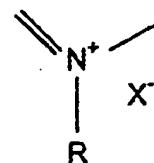


in which:

B is chosen from formula (Ia) and (Ib):



(Ia)



(Ib)

R is a C<sub>1</sub>-C<sub>4</sub> alkyl radical;

R<sub>1</sub> is chosen from a hydrogen atom, a halogen atom, a C<sub>1</sub>-C<sub>4</sub> alkyl radical, and a C<sub>1</sub>-C<sub>4</sub> alkoxy radical;

R<sub>2</sub> is chosen from a hydrogen atom, a C<sub>1</sub>-C<sub>4</sub> alkyl radical, and a C<sub>1</sub>-C<sub>4</sub> alkoxy radical;

$R_4$  is chosen from a hydrogen atom, a halogen atom, a  $C_1$ - $C_4$  alkyl radical, a nitro, an amino radical and a ( $C_1$ - $C_4$ )acylamino radical;

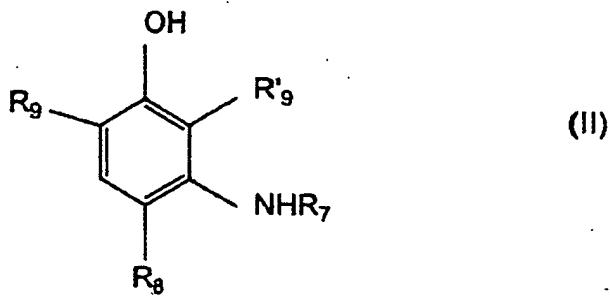
$R_3$  is a hydrogen atom, or  $R_4$  and  $R_3$  together form a 6-membered unsaturated ring bearing a hydroxyl substituent chelated with one of the nitrogen atoms of the azo double bond;

$A$  is a residue  $-NR_5R_6$  in which  $R_5$  is chosen from a hydrogen atom, a  $C_1$ - $C_4$  alkyl radical, a  $C_1$ - $C_4$  monohydroxyalkyl radical and  $C_2$ - $C_4$  polyhydroxyalkyl radical and

$R_6$  is chosen from a hydrogen atom, a  $C_1$ - $C_4$  alkyl radical, a  $C_1$ - $C_4$  monohydroxyalkyl radical, a  $C_2$ - $C_4$  polyhydroxyalkyl radical, a phenyl ring and a  $-CH_2SO_3Na$  radical;

$X^-$  is chosen from a monovalent anion and a divalent anion, and

c) at least one coupler chosen from a meta-aminophenol derivative of formula (II), and an addition salt thereof with an acid:



in which:

$R_7$  is chosen from a hydrogen atom, a  $C_1$ - $C_4$  alkyl radical, a  $C_1$ - $C_4$  monohydroxyalkyl radical, a  $C_2$ - $C_4$  polyhydroxyalkyl radical and a  $C_1$ - $C_4$  monoaminoalkyl radical;

$R_8$  is chosen from a hydrogen atom, a halogen atom, a  $C_1$ - $C_4$  alkyl radical, and a  $C_1$ - $C_4$  alkoxy radical;

$R_9$  and  $R'_9$ , which are identical or different, are chosen from a hydrogen atom, a halogen atom, a  $C_1$ - $C_4$  alkyl radical, a  $C_1$ - $C_4$  alkoxy radical, a  $C_1$ - $C_4$  monohydroxyalkyl radical, a  $C_2$ - $C_4$  polyhydroxyalkyl radical, a  $C_1$ - $C_4$  monohydroxyalkoxy radical and a  $C_2$ - $C_4$  polyhydroxyalkoxy radical;

with the proviso that at least one of the substituents  $R_7$ ,  $R_8$ ,  $R_9$  and  $R'_9$ , is not a hydrogen atom.